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(54) Title: METHODS FOR TREATING DISEASES AND CONDITIONS WITH INVERSE AGONISTS AND FOR SCREENING FOR AGENTS ACTING AS INVERSE AGONISTS

(57) **Abstract:** The present invention describes a method for treating a disease or condition associated with the activity of a G protein coupled receptor (GPCR) comprising administering an inverse agonist for the GPCR, alone or in combination with an agonist for the GPCR, to an organism with a disease or condition associated with the activity of the GPCR in a quantity and for a period that causes an increase in the population of spontaneously active GPCRs associated with that physiological function, thereby producing a therapeutic effect to ameliorate the disease or condition. This provides a basis for so-called “paradoxical pharmacology.” These methods can be used to treat pulmonary airway diseases, including asthma and chronic allergic rhinitis, among other diseases and conditions, including obesity. The present invention further describes a screening method for screening a compound for inverse agonist activity to a GPCR.